

REMARKS

Applicants note with appreciation the allowance of claims 16-19, and also the allowance of claim 5 if rewritten in independent form including all of the limitations of the base claims and any intervening claims. The examiner should note that claim 17 is essentially claim 5 combined with the limitations of claim 1.

**The Rejections:**

**Claims 1-4 stand rejected under 35 U.S.C. 103(a)** as being unpatentable over U.S. Patent No. 4,005,876 to Jorgensen et al. The examiner states that among other things, Jorgensen describes an ignition body 7/8, substantially coextensive with and in physical contact with the propellant 10. Applicants note that in the previous office action having a mailing date of March 11, 2003 (paper No. 12), the examiner characterized the ignition body as reference number 8 rather than as a combination of reference numbers 7 and 8. The applicants believe that the first characterization of the ignition body within '876 (reference number 8) is accurate, and that the second characterization as reference numbers 7/8 is not supported for the following reasons.

The examiner's attention is directed to the emboldened language found in claim 1 of the present application:

1. A gas generator for a vehicle occupant protection system comprising:  
an elongated housing having a predetermined length and having a first end and a second end;  
a plurality of gas exit orifices spaced along the length of said housing;  
a propellant body contained within said housing, said propellant body having a length substantially coextensive with said housing; and  
an ignition body substantially coextensive with said propellant, said ignition body in physical contact with said propellant for substantially the length of

said propellant and said ignition body having a burn rate at least twice that of said propellant body,

wherein ignition of said ignition body essentially provides uniform ignition and combustion of said propellant body along the entire length thereof.

(Emphasis added)

As affirmatively claimed, the ignition body of claims 1-4 must have a burn rate of at least twice that of the propellant body. This is simply not possible when the ignition body is considered to be the steel tube or pressure vessel 7 in combination with ignition body 8. Furthermore, claim 1 also requires that ignition of the ignition body provide uniform ignition and combustion of the propellant body along its entire length. Again, this is simply not possible when the inflator of Jorgensen is activated, particularly if the ignition body is considered to be a combination of steel tube "7" and pyrotechnic compound "8" as characterized by the examiner. Stated another way, the ignition body as defined by the examiner (reference numbers 7/8) is not ultimately ignited in Jorgensen. Rather, the pyrotechnic material "8" is ignited and vented through tube "7". Accordingly, the ignition body as defined by the examiner is not ignited for the steel tube "7" functions as a pressure vessel, not an ignition body. Finally, if the ignition body is characterized as pyrotechnic material "8" as it originally was by the examiner, then it simply is not in physical contact with the propellant body but is instead separated therefrom by the steel tube "7".

Accordingly, a prima facie case of obviousness is properly supported by one or more references that teach, describe, or suggest all of the limitations of the claims. Jorgensen does not describe or suggest an ignition body in physical contact with a propellant body, or, if the ignition body is characterized as "7/8", then Jorgensen does not describe or suggest an ignition body that is ignited (note that the steel tube "7" is not ignited and further note that the steel tube "7" does not have a burn rate at least twice that of the propellant). Applicants therefore respectfully traverse the rejection of claims 1-4.

**Claims 6, 7, 10, and 15 stand rejected under 35 U.S.C. 103(a)** as being unpatentable over Jorgensen in view of Lee et al 6,315,847. Again, claims 6, 7, 10, and 15 all require that ignition of the ignition body provide uniform ignition and combustion of the propellant body along its entire length. Again, this is not possible when the inflator of Jorgensen is activated, particularly if the ignition body is considered to be a combination of steel tube "7" and pyrotechnic compound "8" as characterized by the examiner. Stated another way, the ignition body as defined by the examiner (reference numbers 7/8) is not ultimately ignited in Jorgensen. Rather, the pyrotechnic material "8" is ignited and vented through tube "7". Accordingly, the ignition body as defined by the examiner is not ignited for the steel tube "7" functions as a pressure vessel, not an ignition body. Finally, if the ignition body is characterized as pyrotechnic material "8" as it originally was by the examiner, then it simply is not in physical contact with the propellant body but is instead separated therefrom by the steel tube "7".

Lee does not cure the deficiencies of Jorgensen and therefore a prima facie case of obviousness is not supported. A prima facie case of obviousness is properly supported by one or more references that teach, describe, or suggest all of the limitations of the claims. Neither Jorgensen nor Lee when taken alone or together describes or suggests an ignition body in physical contact with a propellant body. Or, if the ignition body is characterized as "7/8", then neither Jorgensen nor Lee when taken alone or together describes or suggests an ignition body that is ignited (note that the steel tube "7" is not ignited and further note that the steel tube "7" does not have a burn rate at least twice that of the propellant). Applicants therefore respectfully traverse the rejection of claims 6, 7, 10, and 15.

For the same reasons, **the rejection of claims 8, 9, 11, and 14 as rejected under 35 U.S.C. 103(a)** as being unpatentable over Jorgensen in view of Lee and Yoshida et al is respectfully traversed. For neither Lee nor Yoshida cure the deficiencies of Jorgensen and therefore a prima facie case of obviousness is not supported for the same reasons as given above and herein incorporated by

reference.

Finally, for the same reasons, the rejection of claims 12 and 13 as rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen in view of Lee and Yoshida et al, and further in view of Lundstrom et al is respectfully traversed. For neither Lee nor Yoshida nor Lundstrom cure the deficiencies of Jorgensen and therefore a prima facie case of obviousness is not supported for the same reasons as given above and herein incorporated by reference.

The previous response to the Paper No. 12 is herein incorporated by reference in its entirety.

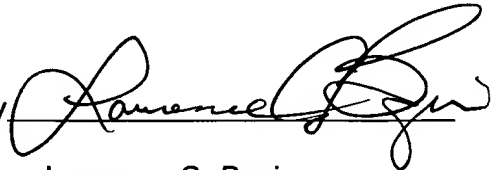
Accordingly, Applicants acknowledge with appreciation the allowability of claims 16-19 and further courteously solicit the allowance of the remaining claims 1-15 and passage of the subject application to issue. In essence, a prima facie case of obviousness must be supported by one or more references that teach with particularity all of the limitations of the claims. For the reasons given, neither Jorgensen nor any other reference of record, when taken alone or in combination, responds fully to the limitations of the pending claims. In the absence thereof, a prima facie case of obviousness is simply not supported. Applicants respectfully request a phone call to the undersigned if the examiner has any further questions relative to the allowability of claims 1-15.

Applicants have not calculated any fee to be due in connection with this paper. The Commissioner is authorized to charge any deficiencies or credit any overpayments to Deposit Account No. 04-1311. A duplicate copy of the first page of this transmittal is also enclosed.

Respectfully submitted,

Date 2/11/04

Dinnin & Dunn, P.C.  
2701 Cambridge Court  
Suite 500  
Auburn Hills, Michigan 48326

By 

Laurence C. Begin  
Reg. No. 42,310  
Phone (248) 364-2100  
FAX (248) 364-2200